

IN THE SPECIFICATION:

Please replace paragraph number [0001] with the following rewritten paragraph:

[0001] This application is a continuation of application Serial No. 09/885,624, filed June 20, 2001, ~~pending~~ now U.S. Patent 6,630,781, issued October 7, 2003, which is a continuation of application Serial No. 09/576,018, filed May 23, 2000, now U.S. Patent 6,529,199, issued July 10, 2001, which is a divisional of application Serial No. 09/102,223, filed June 22, 1998, now U.S. Patent 6,224,447, issued May 1, 2001.

Please replace paragraph number [0013] with the following rewritten paragraph:

[0013] ~~FIGS. 1-8 illustrate cross-sectional views of a process of forming an aperture-type electrode structure, and the electrode structure formed thereby, according to the invention; and FIG. 1 illustrates a cross-sectional view of an aperture-type electrode structure according to the present invention;~~

Please insert paragraph number [0013.1] directly after paragraph [0013]:

[0013.1] FIG. 2 illustrates a first view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.2] directly after paragraph [0013.1]:

[0013.2] FIG. 3 illustrates a second view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.3] directly after paragraph [0013.2]:

[0013.3] FIG. 4 illustrates a third view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.4] directly after paragraph [0013.3]:

[0013.4] FIG. 5 illustrates a fourth view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.5] directly after paragraph [0013.4]:

[0013.5] FIG. 6 illustrates a fifth view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.6] directly after paragraph [0013.5]:

[0013.6] FIG. 7 illustrates a sixth view of a process for forming the aperture-type electrode structure of FIG. 1;

Please insert paragraph number [0013.7] directly after paragraph [0013.6]:

[0013.7] FIG. 8 illustrates a seventh view of a process for forming the aperture-type electrode structure of FIG. 1;

Please replace paragraph number [0014] with the following rewritten paragraph:

[0014] ~~FIGS. 9-14 illustrate cross-sectional views of a process of forming a concentric-type electrode structure, and the electrode structure formed thereby, according to the invention.~~ FIG. 9 illustrates a cross-sectional view of a concentric-type electrode structure according to the present invention;

Please insert paragraph number [0014.1] directly after paragraph [0014]:

[0014.1] FIG. 10 illustrates a first view of a process for forming the concentric-type electrode structure of FIG. 9;

Please insert paragraph number [0014.2] directly after paragraph [0014.1]:

[0014.2] FIG. 11 illustrates a second view of a process for forming the concentric-type electrode structure of FIG. 9;

Please insert paragraph number [0014.3] directly after paragraph [0014.2]:

[0014.3] FIG. 12 illustrates a third view of a process for forming the concentric-type electrode structure of FIG. 9;

Please insert paragraph number [0014.4] directly after paragraph [0014.3]:

[0014.4] FIG. 13 illustrates a fourth view of a process for forming the concentric-type electrode structure of FIG. 9; and

Please insert paragraph number [0014.5] directly after paragraph [0014.4]:

[0014.5] FIG. 14 illustrates a fifth view of a process for forming the concentric-type electrode structure of FIG. 9.

Please replace paragraph number [0029] with the following rewritten paragraph:

[0029] If desired, second insulating layer 8' is then deposited. ~~Insulating~~Second ~~insulating~~ layer 8' may comprise any appropriate insulating material such as dielectric materials like silicon dioxide, silicon nitride, and silicon oxynitride. Preferably, second insulating layer 8' is silicon nitride. The thickness of second insulating layer 8' will, in part, determine the spacing between gate electrode 15 and focusing electrode 19. Accordingly, the thickness of second insulating layer 8' can range from about 0.4 to about 0.5 microns, and is preferably about 0.4 microns.

Please replace paragraph number [0032] with the following rewritten paragraph:

[0032] Optionally, a layer of buffer material may be deposited on conductive layer 19' to prevent undesired etching of portions of the conductive layer 19' during the ~~chemical-~~

chemical-mechanical polishing (CMP) step which follows. A suitable buffering material is silicon nitride.

Please replace paragraph number [0041] with the following rewritten paragraph:

[0041] FIGS. 9-14 illustrate the present invention in a FED containing a ~~concentric-~~concentric-type electrode structure. A concentric-type electrode structure differs from an aperture-type electrode structure in that the focusing electrode 29, rather than located above, is located to the sides of the gate electrode, as shown in FIG. 9. In the present invention, gate electrode 23 and focusing electrode 29 are separated by an insulating layer containing insulating ridge 33, i.e., an upper surface extending above the upper surface of either the gate or focusing electrode. Like the aperture-type focusing electrode, the concentric-type focusing electrode collimates electron beam 17 emitted from each emitter tip and reduces the area where the beam impinges on the phosphor coated display screen 16, thus improving the image resolution. Insulating ridge 33 separates gate electrode 23 and focusing electrode 29 and insulates the voltage differential between them.

Please replace paragraph number [0042] with the following rewritten paragraph:

[0042] A FED containing a concentric-type focus electrode is manufactured similar to the process for making the FED containing the aperture-type focus electrode described above ("the aperture process"), at least until conductive layer 15' has been formed as shown in FIG. 10. A buffer layer may ~~then~~ then be deposited on conducting layer 15' and a CMP process performed to expose underlying first insulating layer 14', as illustrated in FIG. 11.

Please replace paragraph number [0047] with the following rewritten paragraph:

[0047] Variations of the above structure and method are possible. If desired, a ~~dual-~~dual-insulating ridge can be fabricated by forming successive insulating layers 29 (FIG. 14) instead of a single insulating ~~layer~~ layer 29. Moreover, additional focusing electrodes 33 (FIG. 14) could be formed by forming additional vias in conductive layer 15'. Further, while the

gate electrode and focus structure described above are preferably made of the same material and therefore require a single conducting layer, it is possible, but not preferable, to modify the process to obtain two separate conducting layers, one for the gate electrode and another for the focus electrode.